

Remarks

On Gold

by

Samuel Wragg Ferguson

of

Charleston South Carolina.

1807-

No 20

March

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The subject of cold used as a remedy in disease, has of late excited considerable attention in the medical world.

The question whether the effect of this noble remedy be caused by a stimulating or sedative power, from a tendency to establish principles on which its use should be regulated, has an equal claim to attention & interest.

To consider this question is the intention of the following piece. In doing this we shall mention a few of the principal arguments and facts used on either side, attempt to contrast them, and thence draw our conclusion.

Previous however to immediately entering on the subject, it would not be improper to explain myself as to the nature of Cold. Cold is certainly a ^{negative}

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negative quality, and cannot therefore be said to commence at any fixed point. This is proven by the common experiment of making the same temperature appear hot or cold to the same body according to the different circumstances under which it had previously laboured. Thus suppose the mercury at 80° Fahrenheit and suddenly reduced to 60° . the sensation of cold would be ~~evident~~ felt. Again, suppose the mercury at 40° & suddenly elevated to 60° . the opposite sensation, would be the effect.

We shall commence, first, with the effects of intense cold upon the human body. These are languor, indisposition to motion and so great a desire to sleep that even the fear of certain death cannot prevent indulging. In explaining these phenomena, the advocates for the stimulant doctrine, suppose the action of cold similar

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similar to that of opium, brandy & other stimuli, which
when used to excess induce the same symptoms. To this
explanation we cannot readily assent when we consider
the effects of cold water upon the system generally, & the
pulse. From Dr. Currie's valuable publication on water,
we quote the following illustrative fact. "If the affusion
of cold water on the surface of the body be used during
the cold stage of the paroxysm of fever, the respiration is
nearly suspended; the pulse becomes fluttering, feeble,
& of an incalculable frequency, the surface & extremities
become doubly cold and shrivelled and the patient seems
to struggle with the pangs of instant dissolution. I
have no doubt from what I have observed, that in such
circumstances, the repeated affusion of a few buckets of
cold water would extinguish life."

From the above striking fact I think it will appear
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evident, that the effects of cold instead of partaking of a stimulant nature, is as debilitating an agent as we can use. —

In order to prove more particularly its effects on the pulse the following experiment from Dr. Hock's treatise on cold will suffice: it was made upon two Irish porters; both (he says) were strong muscular men, & both in the vigour of life, being little more than thirty years old. It was thought that they might without inconvenience bear immersion without muscular strength. For a longer period than had been submitted to in any of the instances above cited. The result was decisive and satisfactory. In the first, who appeared the strongest of the two, the pulse was reduced in four minutes 12 strokes, in ten minutes 14 strokes, and scarcely perceptible; in about three minutes more, the pulse was nearly obliterated; only twelve pulsations & those exceedingly faint could be made out in the space of half a minute. The other case was of the same nature & equally conclusive.

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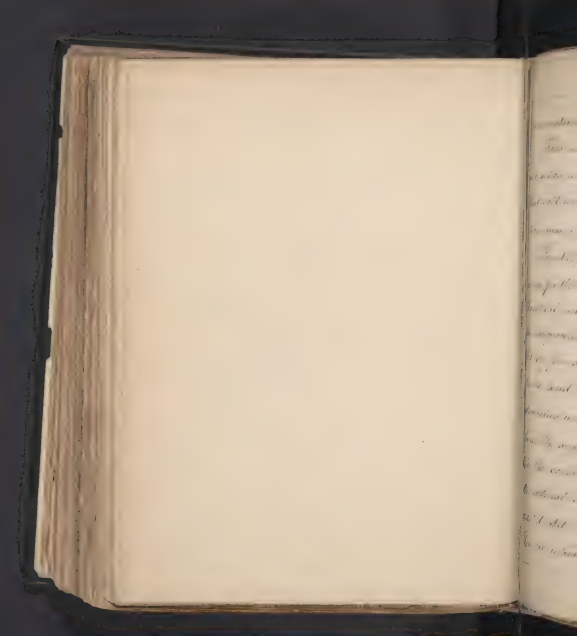
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I may be told however that in most of the experiments made with cold water, the pulse is considerably increased in frequency, nay that in most of the experiments made by the Author just quoted, this was the usual, but it might arise to be observed, that the pulse in these instances is very much diminished in force & frequency. This increase then I conceive tends rather to detract from than add to the stimulant doctrine.

Verney. It has been common to notice the effects produced on those persons who inhabit very northern latitudes. We think this argument one of the pillars of the above doctrine, and has been very satisfactorily answered by the advocates of the opposite opinion than any other. In stature of the Laplanders we are told, is smaller and their complexions and mental endowments inferior to the inhabitants of more temperate regions. The heart of a *Quercus* *robur* *propria* *Chromolaena* when in perfect health.

heart, does not pulsate oftener than from thirty to forty
times in a minute.

Reply. The increased depression from the nose
which an exposure to a cold atmosphere always occasions,
is an act, proves and is a stimulus; for in order, it is contended,
to reach even frequently the vessels must take on a shon-
ger action, this action can only be produced by a stimulus,
which stimulus in this instance is evidently cold. That
cold which causes this increased action is undeny-
ing, but that the phenomena ^{are} capable of a different
solution we think evident. The cold in this instance,
according to our doctrine, diminishes the power of action
long and of course, the excitability is very much
accumulated; this excitability so accumulated is exposed
to being strongly acted upon by a very moderate stimulus —
but always tending to an equilibrium, rather from the
fact is contiguous, is a sufficient stimulus under these
circumstances.



circumstances to excite the nervous system.

Thus would we explain the many instances of morbid action which the application of cold sustains, for we grant that cold under certain circumstances and modes of application may be made to produce stimulating effects.

Further, ³² We will now notice some of the cases in which even for the application of cold to the diseased system.

Several writers on this subject are careful to warn us of the impropriety of using cold affusions during the cold fit of fevers, on account of the dangerous sinking of the pulse and consequent death. Now if cold be

stimulus, why would not these affusions tend rather to brace the system as Park & others tenies or stimulate it?

On the contrary when used during the hot stage, when the internal action is great and the system in a highly excited state, cold affusions are of eminent service. If

these experiments appear to have been made



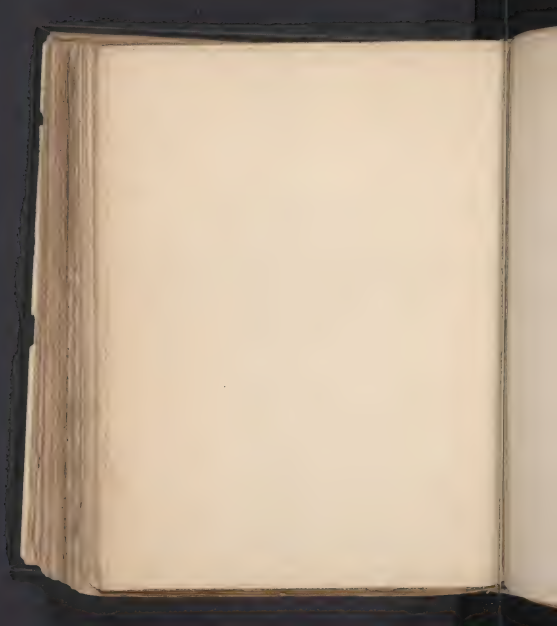
with great calmness and composure mentions a striking
case of a patient in the cold stage. "In this state
'a says' trem was dashed over him as usual, but
not with the usual happy effects; his sweating
was for some minutes almost suspended; his pulse
at the wrist was not to be felt; the pulsations of the
heart were quick and fluttering, a deadly coldness
spread over his surface, and when the restoration re-
turned it was short, nervous and laboured" he pro-
ceeds and says "The same remedy was however used
in the hot stage of the ensuing paroxysm and with the
usual happy effects."

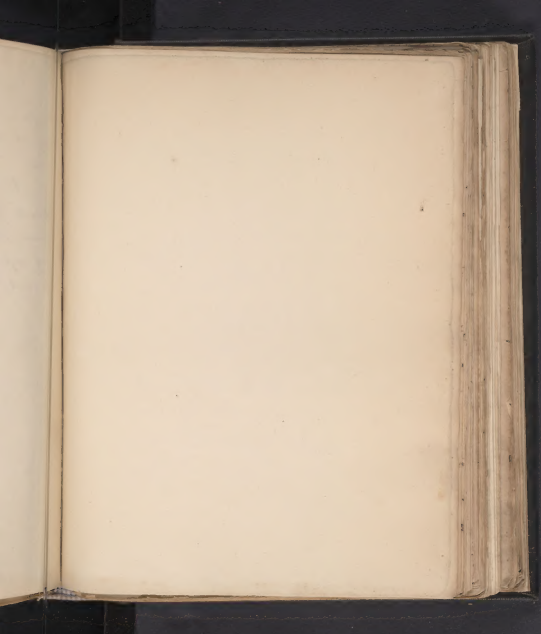
Our worthy professor of the institutes, in his account
of Yellow Fever, tells us "Cold water was a most agreeable &
powerful remedy in this disease. I directed it to be applied by
means of raphins to the head, and to be injected into the
veins by way of glyster". In another place he says
"Cold water when applied to the feet as certainly reduces the
fever."

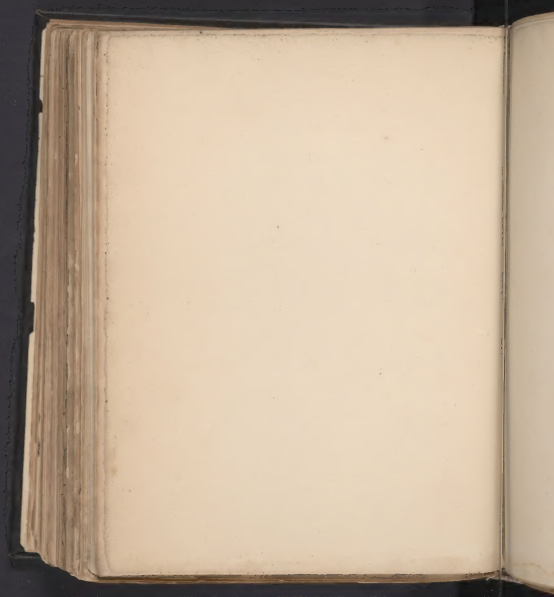


the power in power and frequency, so warm water
applied in the same way produces contrary effects
in it.

Upon the whole we must consider exercise an
obstacle for the sedative effect of cold, and more par-
ticularly so from its medical application, for in many ca-
ses it excites a tonic action when the application of steam
is used, although ice, cold is extremely useful. —







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